



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,234	06/29/2006	Dimitri Dekeyzer	5284-71PUS	9356
27799 7590 01/22/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176				
EXAMINER				
CHOU, ALBERT T				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
01/22/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,234

**Applicant(s)**

DEKEYZER ET AL.

**Examiner**

ALBERT T. CHOU

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-11, 13-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 5-8, 12 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 06/30/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites "A mobility server as claimed in Claim 1, comprising an application server for hosting the application program, the application program providing

*... the application programmer's interface including a facility for communicating with the application server".*

It is not clear how a mobility server may comprise an application server, and the same mobility server also provides an SIP interface with the application server (see Figs. 2-4 & 6).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9, 11, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter "AAPA") in view of draft-njedjou-inter-an-handoffs-00.txt by E. Njedjou et al. (hereinafter "Njedjou"), IETF Mobile IP Working Group, June 2003 (<http://www.watersprings.org/pub/id/draft-njedjou-inter-an-handoffs-00.txt>) and further in view of US Patent Application Publication No. 2005/0155036 A1 by Tiainen et al. (hereinafter "Tiainen")

Regarding claims 1 and 2, AAPA discloses a mobility server for providing mobility management information to an application program providing a service to a user

equipment as part of an Internet Protocol Multi-media Sub-system (IMS), the mobility server **[Fig. 3; Mobility Server/Manager 32]** comprising

a mobility manager **[Figs. 2-3; Mobility Manager 32; para. 0041]** operable to receive mobility dependent evaluation reports providing at least one of an indication of current conditions for communicating with the user equipment and an indication of a relative location of the user equipment **[Figs. 2-3; The UE communicates ANE reports to the Mobility Manages 32, indicating a changes of in conditions of communication and/or the location of communication; para. 0040-0041]**, and to form the mobility management information based on the evaluation reports **[Figs. 2-3; e.g. inform AP providing services to users that a change in service type may be required; para. 0040]**, and

the mobility manager is operable to notify the application program of the mobility management information in response to a subscription for the mobility management information **[Figs. 2-3; The mobility manager 32 operates to inform Application Programs 22 providing services to users that a change in service type may be required; para. 0040]**.

AAPA does not expressly disclose an application programmer's interface operable to communicate call control signaling data between the mobility manager and a session protocol server (S-CSCF) forming part of the IMS, and the subscription for the mobility management information being provided via the session protocol server (S-CSCF) using the call control signaling data.

Njedjou discloses a mobility manager responsible for network handoff assistance function using IP mobility between heterogeneous wireless access networks **[Section 3. Motivation for a Network Controlled Handoff]**. Niedjou further discloses an application programmer's interface operable to communicate call control signaling data between the mobility manager and a session protocol server (S-CSCF) forming part of the IMS **[Fig. 2; Sec. 4.2. Protocol Consideration: delivering of handoff triggering messages from the Mobility Manager MM to the Mobile Node MN, including new AN selection (i.e. S-CSCF in Figs.2-3 of AAPA) information from the MM to the MN]**.

Tiainen discloses a method and system addressing a serving entity in an IMS (IP multimedia core network subsystem) **[Abstract, para. 0001]**, wherein the subscription for the mobility management information being provided via the session protocol server (S-CSCF) using the call control signaling data **[Figs. 3 & 11; para. 0002-0007]**.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide an application programmer's interface between the mobility manager and a session protocol server (S-CSCF) forming part of IMS as disclosed by Njedjou and Tiainen, so that the communication can be made possible between access routers/S-CSCFs or gateways and the mobility manager to help in handoff decision.

Regarding claim 3, AAPA, in view of Niedjou and Tiainen, discloses the application program is operable in response to messages received from the session

protocol server via the call control signaling data to provide the service in accordance with the mobility management information **[Tiainen: Figs. 3 & 11; sends an acknowledgment message/SIP response '200OK' via the ISC interface back to the S-CSCF; para. 0007 & 0067].**

Regarding claim 4, AAPA discloses the mobility server comprising a Session Initiation Protocol (SIP) interface **[Fig. 3; SIP Interface 32.1]**, wherein the application programmer's interface is operable to communicate the call control signaling data via the SIP interface, the call control signaling data being SIP data **[Fig. 3; It is obvious that the call control signaling data being SIP data since the SIP Interface 32.1 is used].**

Regarding claim 9, AAPA discloses the mobility server includes a subscriber context register for storing information relating to the user profile data relevant for the mobile user equipment **[Fig. 3; SCR 32.3; para. 0041]**, the user information being used by the mobility manager to adapt the mobility management information for the application program **[Fig. 3; HSS 24/User Profile 24.2; para. 0042].**

Regarding claim 11, AAPA discloses a multi-media communications system for providing a service to user equipment in accordance with mobility management information, the service being provided by an application program **[Figs. 2-3]**, the system comprising

a session protocol server (S-CSCF) **[Fig. 3; S-CSCF]** operable to control the state of a communications session for at least one user equipment in accordance with user profile data **[Fig. 3; para. 0042-0043]**,

a relative location of the user equipment, and to form the mobility management information based on the evaluation reports **[Figs. 2-3; The UE communicates ANE reports to the Mobility Manages 32, indicating a changes of in conditions of communication and/or the location of communication; para. 0040-0041]**, and

the mobility manager is operable to notify the application program providing the service to the user equipment of the mobility management information in response to a subscription for the information from the application program **[Figs. 2-3; The mobility manager 32 operates to inform Application Programs 22 providing services to users that a change in service type may be required; para. 0040]**.

AAPA does not expressly disclose an application programmer's interface operable to communicate call control signaling data between the mobility manager and the session protocol server (S-CSCF), and the subscription being provided via the session protocol server (S-CSCF) using the call control signaling data.

Njedjou discloses a mobility manager responsible for network handoff assistance function using IP mobility between heterogeneous wireless access networks **[Section 3. Motivation for a Network Controlled Handoff]**. Njedjou further discloses an application programmer's interface operable to communicate call control signaling data between the mobility manager and the session protocol server (S-CSCF) **[Fig. 2; Sec.**



**4.2. Protocol Consideration: delivering of handoff triggering messages from the Mobility Manager MM to the Mobile Node MN, including new AN selection (i.e. S-CSCF in Figs.2-3 of AAPA) information from the MM to the MN].**

Tiainen discloses a method and system addressing a serving entity in an IMS (IP multimedia core network subsystem) **[Abstract, para. 0001]**, wherein the subscription being provided via the session protocol server (S-CSCF) using the call control signaling data **[Figs. 3 & 11; para. 0002-0007]**.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide an application programmer's interface between the mobility manager and a session protocol server (S-CSCF) forming part of IMS as disclosed by Njedjou and Tiainen, so that the communication can be made possible between access routers/S-CSCFs or gateways and the mobility manager to help in handoff decision.

Regarding claims 13 and 14, AAPA discloses a method for providing mobility management information to an application program providing a service to a user equipment in an Internet Protocol Multi-media Sub-system (IMS) **[Figs. 2-3]**, the method comprising

receiving mobility dependent evaluation reports at a mobility server, the evaluation reports providing at least one of an indication of a current state of conditions for communicating with the user equipment or an indication of a relative geographical location of the user equipment **[Figs. 2-3; The UE communicates ANE reports to the**

**Mobility Server/Manages 32, indicating a changes of in conditions of communication and/or the location of communication; para. 0040-0041],**

forming the mobility management information based on the evaluation reports [Figs. 2-3; e.g. inform AP providing services to users that a change in service type may be required; para. 0040], and notifying the application program providing the service to the user equipment of the mobility management information in response to a subscription for the information from the application program, wherein the subscription for the mobility information is provided from the application program to the mobility server [Figs. 2-3;The mobility manager 32 operates to inform Application Programs 22 providing services to users that a change in service type may be required; para. 0040].

AAPA does not expressly disclose communicating call control signaling data between the mobility manager and the application program via a session protocol server (S-CSCF) forming part of the Internet Protocol Multi-media Sub-system.

Njedjou discloses a mobility manager responsible for network handoff assistance function using IP mobility between heterogeneous wireless access networks [Section 3. **Motivation for a Network Controlled Handoff**]. Niedjou further discloses communicating call control signaling data between the mobility manager and the application program via a session protocol server (S-CSCF) forming part of the Internet Protocol Multi-media Sub-system [Fig. 2; Sec. 4.2. **Protocol Consideration: delivering of handoff triggering messages from the Mobility Manager MM to the**

**Mobile Node MN, including new AN selection (i.e. S-CSCF in Figs.2-3 of AAPA) information from the MM to the MN].**

Tiainen discloses a method and system addressing a serving entity in an IMS (IP multimedia core network subsystem) **[Abstract, para. 0001]**, wherein the subscription for the mobility management information being provided via the session protocol server (S-CSCF) using the call control signaling data **[Figs. 3 & 11; para. 0002-0007]**.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide an application programmer's interface between the mobility manager and a session protocol server (S-CSCF) forming part of IMS as disclosed by Njedjou and Tiainen, so that the communication can be made possible between access routers/S-CSCFs or gateways and the mobility manager to help in handoff decision.

Regarding claim 15, AAPA discloses the call control signaling data include Session Initiation Protocol (SIP) messages **[Fig. 3; SIP Interface 32.1]**.

Regarding claim 17, AAPA discloses:

providing access network evaluation reports indicating a current state of conditions for communicating with the user equipment **Figs. 2-3; The UE communicates ANE reports to the Mobility Manages 32, indicating a changes of in conditions of communication and/or the location of communication; para. 0040-0041]**, the mobility server being operable to include an indication of the communications

conditions with the mobility management information [Figs. 2-3; The mobility manager 32 operates to inform Application Programs 22 providing services to users that a change in service type may be required; para. 0040].

***Allowable Subject Matter***

4. Claims 5-8, 12 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham, can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Albert T Chou/

Examiner, Art Unit 2416

January 19, 2009